

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 10 is objected to because of the following informalities: Claim 10, line 2, "as" should be --is--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-16, 19, 20, 23, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Viner 6,418,585 (hereinafter Viner).

The patent to Viner discloses in Figs. 1-3 a mop 10 for use in mopping floors comprising a handle 12, the handle has a distal end and a proximal end, the handle extends along a longitudinal axis, a slidable tubular section or pusher 14, the pusher is slideably connected to the handle (col. 3, lines 64-65), the pusher is able to slideably move toward the distal end of the handle, the pusher is able to slideably move toward the proximal end of the handle, the pusher has a distal end and a proximal end, a plate or mop element support 26 having a length and a width, the length being longer than the width, a transverse axis is disposed along the length, the mop element support has an upper surface and a lower surface, the upper surface of the mop element support is

connected to the distal end of the handle (Figs. 2 and 3), the mop element support has a first hinge line 36 (Fig. 2A), the mop element support is able to fold along the first hinge line 36, the first hinge line 36 is along the transverse axis, the transverse axis is perpendicular to the longitudinal axis, and a mop element 48, the mop element 48 is adjacent to the lower surface of the mop element support 26, the mop element 48 is able to fold along the first hinge line (Figs. 4 and 5), wherein movement of the pusher 14 toward the distal end of the handle causes the pusher 14 to "engage" (i.e., within grooves 44a, 44b, 46a, 46b) the mop element support (through fingers 20, 20a and 22, 22a) such that the mop element support and the mop element fold along the first hinge line, and movement of the pusher 14 toward the proximal end of the handle causes the pusher to "engage" (i.e., within grooves 44a, 44b, 46a, 46b) the mop element support (through fingers 20, 20a and 22, 22a) such that the mop element support and the mop element are unfolded along the first hinge line.

As for claim 2, the distal end of the pusher 14 has two arms 20, 20a.

As for claim 3, the arms 20, 20a engage the mop element support when the pusher is moved toward the distal end of the handle (Fig. 3).

As for claim 4, each arm 20, 20a has a cam engaging surface 20', 20a'.

As for claim 5, the mop element support has a front cam 20, 22 and a rear cam 20a, 22a.

As for claim 6, the front cam and the rear cam, as mentioned for claim 5 above, are attached to the mop element support (at least indirectly).

As for claim 7 (which depends on claim 5, which claim 5 ultimately depends on claim 1), in a broad sense, the front cam 20, 22 which is deemed to have a central portion, a distal portion and a stop portion.

As for claim 8, the stop portion is at an angle of approximately 90 degrees to the central portion (at upper portion 18a in Fig. 2) and the distal portion is at an angle of approximately 130 degrees to the central portion (see lower portions of cam 20, 22 in Fig. 2).

As for claim 9, and for similar reasons explained for claim 7 above, the rear cam can be considered the other arm or finger 20a, 22a which is deemed to have a center portion, a lower arm and an upper arm.

As for claim 10, the lower arm is at an angle of approximately 90 degrees to the center portion and the upper arm is at an angle of approximately 90 degrees to the center portion (see side view of rear cam 20a, 22a in Fig. 3 which are merely straight portions along wall 18c, for example).

As for claim 11, the stop portion engages the pusher to limit the movement of the pusher toward the proximal end.

As for claim 12, the mop element support has a second hinge line 36a (Fig. 2A).

As for claim 13, the second hinge line 36a is substantially parallel to the first hinge line 36 (Fig. 2A).

As for claim 14, the mop element support has a first portion and a second portion, the first portion is connected to the second portion along the first hinge line 36 (Fig. 2A).

As for claim 15, the mop element support has a third portion, the third portion is connected to the first portion along a second hinge line 36a (Fig. 2A).

As for claim 16, the mop element support 26 includes a fluid opening 56 (col. 5, lines 1-5).

As for claim 19, if so desired, the mop element 48 can be removed from the mop element support.

As for claim 20, the mop element 48 includes a sponge (col. 4, lines 37-39).

As for claim 23, the pusher 14 includes a grip portion (i.e., the top portion) and a yoke portion (i.e., the bottom portion) (Fig. 1).

As for claim 26, the lower end of the handle at 12a defines a "boss" on the distal end of the handle (Fig. 2)

As for claim 27, the "boss" at 12a is connected to the mop element support 26.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viner in view of Zottola 2,916,754 (hereinafter Zottola).

The patent to Viner discloses all of the recited subject matter as set forth above with the exception of the mop element support including an attachment portion for a scrub brush as well as a scrub brush itself. The patent to Zottola discloses a mop element plate or support 60 including an attachment portion for a scrub brush and a scrub brush 22 (Figs. 1 and 2). It would have been obvious to one of ordinary skill in the art to have provided Viner's mop element support with an attachment portion for a scrub brush as well as a scrub brush as taught by Zottola for adding versatility to the mop device by adding a scrubbing element. Such a combination of a wringer sponge mop and scrub brush is old and well known in the art.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Viner in view of France 2 709 056 (hereinafter France '056).

The patent to Viner discloses all of the recited subject matter as set forth above with the exception of the mop element including a sponge holder, the sponge holder attaching to the mop element support. France '056 teaches in Fig. 4, for example, a mop element 3 including a sponge holder 10, the sponge holder 10 attaching to the mop element support at 2, 13, 15. It would have been obvious to one of ordinary skill in the art to have provided Viner's mop element with a sponge holder, the sponge holder attaching to the mop element support as taught by France '056 for the purpose of securely attaching the mop element to the mop itself. It is the Examiner's position that whether one utilizes a sponge holder to attach a mop element to the mop element support or simply uses adhesive to do the same, either arrangement is deemed obvious

in view of the other and are deemed mere mechanical equivalents for attaching the mop element to the mop element support.

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Viner in view of Davis 3,484,888 (hereinafter Davis).

The patent to Viner discloses all of the recited subject matter as set forth above with the exception of the mop element including a scrubber strip. The patent to Davis discloses a mop element 26 including a scouring or scrubber strip 34 (Figs. 1 and 2). It would have been obvious to one of ordinary skill in the art to have provided Viner's mop element with a scrubber strip as taught by Davis for adding versatility to the mop by adding a scrubbing element thereto.

8. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viner.

As for claim 24 reciting that a grip portion is removable from a yoke portion, it would have been obvious to one of ordinary skill in the art to have modified Viner's pusher such that it is two pieces instead of one as a mere choice in mechanical design to enable quick disassembly of the mop device.

As for claim 25 reciting that the grip portion includes an overmolded material, it would have been obvious to one of ordinary skill in the art to have made the pusher of a rubber sleeve to facilitate handling of the grip portion.

### ***Conclusion***

9. Applicant's arguments filed 10 October 2007 have been fully considered but they are not persuasive.

Applicant argues with respect to the Viner patent that the cleansing element 24 of Viner moves to an unfolded position through the use of springs 54a and 54b, which pull the bent sections 26a and 26b of the plate 26 (Fig. 3; col. 5, lines 5-8). It is the Examiner's position that the fact that Viner may teach the use of springs to pull the bent sections 26a and 26b back to the position shown in Fig. 3 does not render claim 1 patentable over Viner. The fact that Viner may teach such additional structure (i.e., springs) not claimed is patentably irrelevant. Here, Viner's tubular section or pusher 14 is slideable (col. 3, lines 64-67) and will inherently slide towards the proximal end of the handle causing the mop element support and mop element to be unfolded along the first hinge line. Further, there is nothing to prevent one from manually sliding or pushing the pusher 14 back towards the proximal end of the handle notwithstanding the disclosed spring arrangement. In any case, the language of amended claim 1 fails to adequately define over Viner for the reasons set forth.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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/Randall Chin/  
Primary Examiner  
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Page 11